

DRAFT Statement of Basis - Narrative
NSR Permit

Type of Permit Action: Regular-Significant Revision

Facility: La Luz Energy Center

Company: Public Service Company of New Mexico (PNM)

Permit No(s): 5041-M1 and TV-TBD, Acid Rain P263A

Tempo/IDEA ID No.: 32274 - PRN20160001

Permit Writer: Joseph Kimbrell

Fee Tracking (not required for Title V)

Tracking	NSR tracking entries completed: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	NSR tracking page attached to front cover of permit folder: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	Paid Invoice Attached: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	Balance Due Invoice Attached: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
	Invoice Comments: \$7,920.00 Paid in full as of 9/21/2016.

Permit Review	Date to Enforcement: 10/31/2016	Date of Enforcement Reply: TBD
	Date to Applicant: 10/31/2016	Date of Applicant Reply: TBD
	Date to EPA: 10/31/2016	Date of EPA Reply: TBD or N/A
	Date to Supervisor: 10/31/2016	

1.0 Plant Process Description:

The Public Service Company of New Mexico (PNM) is New Mexico's largest electricity provider and is based in Albuquerque, New Mexico.

The La Luz Energy Center air quality permit allows for two General Electric (GE) LM6000 PC Sprint™ simple-cycle turbines fueled with natural gas and two sulfur hexafluoride (SF₆) circuit breakers. The only air emissions from the circuit breakers are 9.7 tons per year of greenhouse gas emissions in the form of SF₆.

As of application number 5041-M1, only one of the natural gas turbines has been constructed.

Turbine Unit 1 started operating December 2015.

Each turbine can produce up to a nominal 42 megawatts (MW) of electricity.

Nitrogen dioxide (NO₂) air emissions from the turbines are reduced by approximately 90% using selective catalytic reduction (SCR) units. The permit allows for two atmospheric 4962-gallon vertical storage tanks of aqueous ammonia, one for each SCR. Only one ammonia tank has been installed at this time. Carbon monoxide (CO) air emissions are reduced by approximately 85% using two oxidation catalysts.

NO₂ and CO air emissions from the turbines are monitored and recorded using Continuous Emissions Monitoring Systems (CEMS) that measure actual air emissions.

The facility is located at latitude 34°, 36', 58.3" N and longitude -106°, 48', 54.0" W. The Universal Transverse Mercator (UTM) coordinates are 333,600 Easting, 3,831,980 Northing, Zone 13, North American Datum (NAD) 83, at an elevation of 5175 feet. The approximate location of this facility is 3.9 miles southwest of the intersection of State Route 314 and 309 in the city of Belen in Valencia County.

2.0 **Description of this Permit Revision:**

This significant air permit revision consists of changing the status of the facility to a minor Prevention of Significant (PSD) facility. The facility is no longer a Major PSD facility because the U. S. Supreme Court vacated a portion of the Green House Gas (GHG) Permit Regulation (called the Tailoring Rule) on June 23, 2014. For more information, see section 4 of this Statement of Basis.

The Air Quality Bureau is also adding 10 tpy emission limits for each pollutant during startup or shutdown and during a malfunction, if a malfunction is to occur; is changing some of the record-keeping requirements for ammonia (NH₃); is correcting the NO₂ emissions limits that are required by New Source Performance Standard located at 40 CFR 60, Subpart KKKK; and is making other corrections to errors that were made to the original permit.

3.0 **Source Determination:**

1. The emission sources evaluated include **the La Luz Energy Center.**

2. Single Source Analysis:

A. SIC Code: Does the entire facility belong to one industrial grouping (i.e., same two-digit SIC code grouping, or support activity)? Yes

B. Common Ownership or Control: Is the entire facility under common ownership or control? Yes

C. Contiguous or Adjacent: Is the entire facility located on one or more contiguous or adjacent property? Yes

3. Is the facility, as described in the application, the entire source in accordance with these permit regulations 20.2.70 (Title V Operating Permits), 20.2.72 (Minor Source Construction Permits), 20.2.73 (Notice of Intent Registration), and 20.2.74 (Prevention of Significant Deterioration) NMAC applicability purposes? Yes

4.0 **Prevention of Significant Deterioration (PSD) Permit Applicability Determination:**

The Facility is a minor PSD source.

In 2013, the La Luz Energy Center was initially permitted as a Prevention of Significant Deterioration major source (Permit Number PSD-5041) based on the facility's Green House Gas (GHG) emission rates, however, on June 23, 2014, the U.S. Supreme Court vacated the

portion of the GHG permit regulation (called the Tailoring rule) that required a PSD permit only due to the level of GHG air emissions. The U.S. Supreme Court ordered the Environmental Protection Agency (EPA) to take steps to rescind that part of the regulation.

The Air Quality Bureau (AQB) has determined, that due to the Supreme Court Vacatur on June 23, 2014 (No. 12-1146 U Utility Air Regulatory Group vs. Environmental Protection Agency Et. Al) that a PSD permit is no longer required based on the level of air emissions from the other regulated air pollutants. A facility is PSD Major if any other regulated air pollutant is 250 tons per year (tpy) or more. This facility's air emission limits are: 63.7 tpy NO_x, 76.7 tpy, 19.6 tpy VOCs, 7.1 tpy SO_x, 45 tpy each of TSP, PM₁₀, and PM_{2.5}; 7.1 tpy total Hazardous air pollutants; 52.5 tpy ammonia; and 2.5 tpy of formaldehyde.

The control requirements in the permit are not changing. However, these control requirements will no longer be defined as PSD Best Available Control Technology (BACT). Also, the allowable pound per hour (pph) and ton per year (tpy) emission limits are not increasing except to add an emission limit of 10 tpy for each pollutant during malfunctions. The pph emission limits during startup and shutdown and during unpredictable malfunctions are the same as during startups and shutdowns that are predicted, so the pph emission rates are no higher. The pph and tpy emission limits are used in the air dispersion modeling to verify that no National Ambient Air Quality Standard (NAAQS) will be exceeded.

Since the facility is no longer a PSD facility, the part per million (ppm) PSD BACT emission limits for NO_x, CO, TSP, PM₁₀, PM_{2.5} will be removed from the permit since these are no longer required. The CO₂e GHG emission estimates in the application and permit are not in same units as the NSPS TTTT emission limit but will meet the 120 lb/MMBtu emission limit in a recently promulgated federal regulation which is a New Source Performance Standard at 40 CFR 60, Subpart TTTT.

Before removing any PSD BACT requirements from the permit, AQB must obtain concurrence from EPA and therefore, EPA is reviewing this permit. Here is a link to information regarding the vacatur: <https://www.epa.gov/nsr/clean-air-act-permitting-greenhouse-gases>

5.0 History (In descending chronological order, showing NSR and TV): *The asterisk denotes the current active NSR and Title V permits that have not been superseded.

Permit Number	Issue Date	Action Type	Description of Action (Changes)
P262	TBD	Title V New	A Title V Operating Permit is required if a facility has an Acid Rain Permit. After air emissions controls, this facility is not Title V Major. A facility is Title V Major if the total of all Hazardous air pollutants is 25 tpy or single hazardous air pollutant is 10 tpy, or if any other regulated air pollutant is 100 tpy or more.

5.0 History (In descending chronological order, showing NSR and TV): *The asterisk denotes the current active NSR and Title V permits that have not been superseded.

Permit Number	Issue Date	Action Type	Description of Action (Changes)
*NSR 5041M1	In Process	NSR Significant Revision	PSD Minor This significant permit revision consists of changing the permit to a PSD minor source because the facility is no longer PSD major, modifying the record-keeping requirements of NH ₃ , modifying the NO _x emissions standards to correctly reflect the requirements of 40 CFR Subpart KKKK, and adding turbine malfunction emissions for all applicable pollutants in accordance with 20.2.72.219.D.(1)(a) NMAC.
PSD 5041R1	2/2/2016	PSD Admin revision	PSD Major for GHG Only. This administrative permit revision consists of correcting typographical errors in accordance with 20.2.72.219.A(1)a NMAC.
P262A	6/17/2013	Acid Rain, Title IV New	Application received 3/22/2013. An Acid Rain Permit is required for facilities that generate commercial electric power.
PSD 5041	9/9/2013	PSD New	Was a new PSD Major Source from the start due to GHG emissions. Since GHGs are major, these other pollutants are compared at the lower PSD significance levels: NO_x (40 tpy), PM (25 tpy), PM₁₀ (15 tpy) and PM_{2.5} (10 tpy). The facility will be comprised of two General Electric (GE) LM6000 PC Sprint™ simple-cycle gas turbines fired on natural gas and producing a nominal 42 megawatts (MW) of electricity each, as well as control equipment and ancillary equipment. The proposed control technology for each turbine will include water injection and selective catalytic reduction (SCR) for nitrogen oxide (NO _x) emissions; an oxidation catalyst for carbon monoxide (CO) and volatile organic carbon (VOC) emissions; and an inlet air filter for particulate matter (PM) emissions. The ancillary equipment will include two atmospheric 6,000-gallon vertical storage tanks for aqueous ammonia (i.e., one for each turbine), as well as pumps, water tanks, wastewater tanks, air compressors, and fin fan coolers. The two units are proposed to be built sequentially.

6.0 Public Response/Concerns: As of November 01, 2016 the AQB has received two written citizen letters. One citizen called with questions, but was not interested in submitting any written comments.

The initial citizen letters have been sent to the two citizens. A 30-day comment period on the Statement of Basis is required and begins on the date that the Statement of Basis is

posted to the Air Quality Bureau website and sent to the Albuquerque Field Office which will be on about November 2, 2016.

7.0 Compliance Testing History:

Unit No.	Compliance Test	Test Dates
1	Tested in accordance with EPA test method 7E for NO _x , EPA test method 10 for CO, and EPA test method 320 for NH ₃ as required by NSR permit PSD5041.	11/10/2015

8.0 Startup and Shutdown:

- A. If applicable, did the applicant indicate that a startup, shutdown, and emergency operational plan was developed in accordance with 20.2.70.300.D(5)(g) NMAC? **No**
- B. If applicable, did the applicant indicate that a malfunction, startup, or shutdown operational plan was developed in accordance with 20.2.72.203.A.5 NMAC? **Yes**
- C. Did the applicant indicate that a startup, shutdown, and scheduled maintenance plan was developed and implemented in accordance with 20.2.7.14.A and B NMAC? **No**
- D. Does the facility have emissions due to routine or predictable startup, shutdown, and maintenance? **Yes**. If so, have all emissions from startup, shutdown, and scheduled maintenance operations been permitted? **Yes**

Emissions during startup and shutdown are higher since the control devices are not working since the temperature of the exhaust is not yet high enough.

Compliance and Enforcement Status [Title V and NSR/PSD new or modification:
Email sent to Ernie Tellez in the compliance and enforcement section on 10/28/2016.

- 9.0 **Modeling:** For permit application number, NSR 5041M1a modeling waiver was approved on 7/20/16 by Sufi Mustafa based on the air dispersion modeling of the original permit. Although emission limits for startup and shutdown and during a malfunction were added, the emission rates are no higher than what was modeled during routine or predictable startup and shutdown.

10.0 **State Regulatory Analysis(NMAC/AOCR):**

20 NMAC	Title	Applies (Y/N)	Unit(s) or Facility	Comments
2.1	GENERAL PROVISIONS	Yes, Always	Entire Facility	The facility is subject to Title 20 Environmental Protection Chapter 2 Air Quality of the New Mexico Administrative Code so is subject to Part 1 General Provisions, Update to Section 116 of regulation for Significant figures & rounding. Applicable with no permitting requirements.
2.3	Ambient Air Quality Standards	Yes for NSR, No for TV	Entire Facility	<p>NSR: 20.2.3 NMAC is a SIP approved regulation that limits the maximum allowable concentration of Total Suspended Particulates, Sulfur Compounds, Carbon Monoxide and Nitrogen Dioxide.</p> <p>Title V: 20.2.3.9 NMAC, LIMITATION OF APPLICABILITY TO 20.2.70 NMAC. The requirements of NMAAQs are not applicable requirements under 20.2.70 NMAC, as defined by 20.2.3.9 NMAC, 20.2.3.9 NMAC does not limit the applicability of this part to sources required to obtain a permit under the minor NSR regulation, 20.2.72 NMAC, nor does it limit which terms and conditions of NSR permits issued pursuant to 20.2.72 NMAC are applicable requirements in a Title V permit.</p>
2.7	Excess Emissions	Yes, Always	Entire Facility	Applies to all facility sources
2.33	Gas Burning Equipment - Nitrogen Dioxide	No		<p>This facility does not have new gas burning equipment (external combustion emission sources, such as gas and oil fired boilers and heaters) having a heat input of greater than 1,000,000 million British Thermal Units per year per unit</p> <p>Note: "New gas burning equipment" means gas burning equipment, the construction or modification of which is commenced after February 17, 1972.</p> <p>The definition of gas burning equipment in this regulation is very broad, implying that it could apply to gas turbines. However, research into the hearing record indicated that this regulation was only intended to apply to external combustion equipment such as heaters and boilers. See procedure at: https://www.env.nm.gov/aqb/procedures/NMAC-Applicability-Final.doc.</p>
2.61	Smoke and Visible Emissions	Yes	1 & 2	The two GE LM6000 combustion turbines (CTs) are stationary combustion equipment and subject to this regulation which has a 20 percent opacity limit.

20 NMAC	Title	Applies (Y/N)	Unit(s) or Facility	Comments
2.70	Operating Permits	Yes	Entire Facility	The source is a Title V Source as defined at 20.2.70.7 NMAC since it has an acid rain permit.
2.71	Operating Permit Fees	Yes	Entire Facility	Source is subject to 20.2.70 NMAC as cited at 20.2.71.109 NMAC.
2.72	Construction Permits	Yes	Entire Facility	Specify Section 200.C Potential Emission Rate (PER) is \geq 10 pph and 25 tpy for a regulated air pollutant that has a National or a State Ambient Air Quality Standard. The facility is subject to 20.2.72 NMAC.
2.73	NOI & Emissions Inventory Requirements	Yes, Always	Entire Facility	Applies to all facilities that require a permit. PER \geq 10 tpy for a regulated air contaminant.
2.74	Permits-Prevention of Significant Deterioration	No	Entire Facility	Source is not one of the 28 listed at 20.2.74.501 NMAC where a PSD permit is required if emissions are 100 tpy. The facilities Potential To Emit is less than 250 tpy for any regulated air pollutant.
2.75	Construction Permit Fees	Yes	Entire Facility	This facility is subject to these permit application fees 20.2.72 NMAC
2.77	New Source Performance	Yes	See Sources subject to 40 CFR 60	Applies to any stationary source constructing or modifying and which is subject to the requirements of 40 CFR Part 60.
2.78	Emissions Standards for HAPs	No		This regulation applies to all sources emitting hazardous air pollutants, which are subject to the requirements of 40 CFR Part 61.
2.79	Permits – Nonattainment Areas	No		This facility is not located in, nor does it affect, a nonattainment area. Link to Non-attainment Link areas
2.82	MACT Standards for Source Categories of HAPs	Yes	See sources subject to 40 CFR 63	This regulation applies to all sources emitting hazardous air pollutants, which are subject to the requirements of 40 CFR Part 63.

11.0 Federal Regulatory Analysis:

Federal Regulation	Title	Applies (Y/N)	Unit(s) or Facility	Comments
Air Programs Subchapter C (40 CFR 50)	National Primary and Secondary Ambient Air Quality Standards	Yes	Entire Facility	Independent of permit applicability; applies to all regulated units of air emissions for which there is a Federal Ambient Air Quality Standard.
NSPS Subpart A (40 CFR 60)	General Provisions	Yes	See sources subject to a Subpart in 40 CFR 60	Applies if any other subpart applies.
40 CFR 60.330	Stationary Gas Turbines	No		These units were constructed after

Federal Regulation	Title	Applies (Y/N)	Unit(s) or Facility	Comments			
Subpart GG				February 18, 2005 and so instead are subject to Subpart KKKK.			
40 CFR Part 60 Subpart KKKK	Standards of Performance for Stationary Combustion Turbines	Yes	Units 1 and 2	The Turbines have a heat input greater than the 10 MMBtu/hour threshold of this regulation. These units will be installed after February 18, 2005.			
NSPS 40 CFR 60 Subpart TTTT	Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units	Yes	Units 1 and 2	<p>This subpart establishes emission standards for GHG emissions for a stationary combustion turbine. The two turbines will be allowed to use only uniform fuel that results in a consistent emission rate of less than 120 lb CO₂/MMBtu, and will maintain purchase records for permitted fuel. No monitoring of CO₂ emission rates is required for turbines that use uniform fuel. See 60.5520(d)(1).</p> <p>Uniform fuels have a consistent chemical composition such as commercial quality natural gas.</p> <p>Per 60.5509(a)(1), facility is not subject if it is not a base load facility rating greater than 260 GJ/h (250 MMBtu/h) of fossil fuel.</p> <p>Table 2 of Subpart TTTT of Part 60</p> <table><tr><td>Newly constructed or reconstructed stationary combustion turbine that supplies its design efficiency or 50 percent, whichever is less, times its potential electric output or less as net-electric sales on either a 12-operating month or a 3-year rolling average basis and combusts more than 90% natural gas on a heat input basis on a 12-operating-month rolling average basis [</td><td>50 kg CO₂ per gigajoule (GJ) of heat input (120 lb CO₂/MM Btu).</td></tr></table>		Newly constructed or reconstructed stationary combustion turbine that supplies its design efficiency or 50 percent, whichever is less, times its potential electric output or less as net-electric sales on either a 12-operating month or a 3-year rolling average basis and combusts more than 90% natural gas on a heat input basis on a 12-operating-month rolling average basis [50 kg CO ₂ per gigajoule (GJ) of heat input (120 lb CO ₂ /MM Btu).
Newly constructed or reconstructed stationary combustion turbine that supplies its design efficiency or 50 percent, whichever is less, times its potential electric output or less as net-electric sales on either a 12-operating month or a 3-year rolling average basis and combusts more than 90% natural gas on a heat input basis on a 12-operating-month rolling average basis [50 kg CO ₂ per gigajoule (GJ) of heat input (120 lb CO ₂ /MM Btu).						
NESHAP Subpart A (40 CFR 61)	General Provisions	No	See sources subject to a Subpart in 40 CFR 61	Applies if any other subpart applies.			
MACT Subpart A (40 CFR 63)	General Provisions	Yes	See sources subject to a Subpart in 40 CFR 63	Applies if any other subpart applies.			

Federal Regulation	Title	Applies (Y/N)	Unit(s) or Facility	Comments
MACT 40 CFR 63 Subpart YYYY	National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines	No		This Subpart establishes emission and operating limitations for Hazardous Air Pollutants (HAPs) for stationary combustion turbines. These standards apply to stationary combustion turbines that are at a major source of any HAP. The facility is not a major source of any HAP and therefore Subpart YYYY does not apply. A major source of HAPs is one that has 10 tons per year (tpy) of any single HAP or 25 tpy all HAPs combined. This facility emits 7.1 tpy total HAPs and 2.5 tpy of formaldehyde.
40 CFR 64	Compliance Assurance Monitoring	No		This part regulates a pollutant-specific emissions unit at a source that is subject to a part 70 permit. Applicability to this regulation is applied at the first renewal of an issued Title V permit. The facility is not subject since it is exempt since it has a method for continuously monitoring emissions (64.2(b)(1)(vi).
40 CFR 68	Chemical Accident Prevention	No		This part sets forth the requirements concerning the prevention of accidental releases of regulated substances. The facility does not have more than a threshold quantity of a regulated substance in a process, as determined under §68.115, 40 CFR 68, therefore this part does not apply.
40 CFR 70	Title V- State Operating Permit Programs	No		Operating Permit Program – is not applicable – New Mexico State has full delegated authority and Title V is administered under 20.2.70 NMAC.
40 CFR 72	Title IV – Acid Rain	Yes	Units 1 and 2	(a) Each of the following units shall be an affected unit, and any source that includes such a unit shall be an affected source, subject to the requirements of the Acid Rain Program: (1) A unit listed in table 1 of §73.10(a) of this chapter.(2) A unit that is listed in table 2 or 3 of §73.10 of this chapter and any other existing utility unit, except a unit under paragraph (b) of this section
40 CFR 73	Title IV – Acid Rain Sulfur Dioxide Allowance Emissions	Yes	Units 1 and 2	The following parties shall be subject to the provisions of this part: (a) Owners, operators, and designated representatives of affected sources and affected units pursuant to §72.6 of this chapter; (b) Any new independent power producer as defined in section 416 of the Act and §72.2 of this chapter, except as provided in section 405(g)(6) of the Act; (c) Any owner of an affected unit who may

Federal Regulation	Title	Applies (Y/N)	Unit(s) or Facility	Comments
				apply to receive allowances under the Energy Conservation and Renewable Energy Reserve Program established in accordance with section 404(f) of the Act;(d) Any small diesel refinery as defined in §72.2 of this chapter, and (e) Any other person, as defined in §72.2 of this chapter, who chooses to purchase, hold, or transfer allowances as provided in section 403(b) of the Act
40 CFR 75	Continuous Emission Monitoring	Yes	Units 1 and 2	This part establishes requirements for monitoring, recordkeeping, and reporting of SO ₂ , NO _x , and CO ₂ emissions, volumetric flow, and opacity data from affected units under the Acid Rain Program. Acid rain provisions apply to the facility, therefore the facility will follow the monitoring, recordkeeping and reporting requirements.
Title IV – Acid Rain 40 CFR 76	Acid Rains Nitrogen Oxides Emission Reduction Program	No		Turbines 1 and 2 are not subject to this part of the acid rain provisions since they do not use coal as fuel.
Title VI – 40 CFR 82	Protection of Stratospheric Ozone	NO		<p>Not applicable to this facility. The only equipment at the site with controlled substances are small building air conditioners.</p> <p>EPA Guidance Page for 40 CFR 82: https://www.epa.gov/section608 40 CFR 82 may apply if you: (40 CFR 82.1 and 82.100) produce, transform, destroy, import or export a controlled substance or import or export a controlled product; (40 CFR 82.30) if you perform service on a motor vehicle for consideration when this service involves the refrigerant in the motor vehicle air conditioner; (40 CFR 82.80) if you are a department, agency, and instrumentality of the United States subject to Federal procurement requirements; (82.150) if you service, maintain, or repair appliances, dispose of appliances, refrigerant reclaimers, if you are an owner or operator of an appliance, if you are a manufacturer of appliances or of recycling and recovery equipment, if you are an approved recycling and recovery equipment testing organization, and/or if you sell or offer for sell or purchase class I or class I refrigerants. Note: Owners and operators of appliances subject to 40 CFR 82.150 Recycling and Emissions Reduction have recordkeeping and reporting requirements even if the owner/operator is not performing the actual work.</p> <p>Note: Disposal definition in 82.152: Disposal means the process leading to and including: (1) The</p>

Federal Regulation	Title	Applies (Y/N)	Unit(s) or Facility	Comments
				discharge, deposit, dumping or placing of any discarded appliance into or on any land or water; (2) The disassembly of any appliance for discharge, deposit, dumping or placing of its discarded component parts into or on any land or water; or (3) The disassembly of any appliance for reuse of its component parts. "Major maintenance, service, or repair means" any maintenance, service, or repair that involves the removal of any or all of the following appliance components: compressor, condenser, evaporator, or auxiliary heat exchange coil; or any maintenance, service, or repair that involves uncovering an opening of more than four (4) square inches of "flow area" for more than 15 minutes.

12.0 Minor Construction Permit Exempt Equipment:

Minor Construction Permit Exempt Equipment (not entered into Tempo database)

Unit Number	Source Description	Manufacturer	Model No.	Max Capacity	List Specific 20.2.72.202 NMAC Exemption (e.g. 20.2.72.202.B.5)	Date of Manufacture /Reconstruction ²
			Serial No.	Capacity Units	Insignificant Activity citation (e.g. IA List Item #1.a)	Date of Installation /Construction ²
Haul Road	Ammonia Delivery Truck Travel	N/A	N/A	N/A	20.2.72.202.B.5 emissions of any regulated air pollutant are less than ½ tpy	N/A
			N/A	N/A	N/A	N/A
TK-1	Ammonia Storage Tank	Steel Structures, Inc.	2012	4962	20.2.72.202.B.5 emissions of any regulated air pollutant are less than ½ tpy	2015
			3221	gal	N/A	15-Oct
TK-2	Ammonia Storage Tank	TBD	N/A	N/A	20.2.72.202.B.5 emissions of any regulated air pollutant are less than ½ tpy	N/A
			N/A	N/A	N/A	N/A

13.0 New/Modified/Unique Conditions (Format: Condition#: Explanation):

- A. A redline version of the original permit is included in Section 20 and the changes are summarized below.

One of the turbines, Unit 1, was installed in October of 2015 and began operation in December of 2015. It was stated in the initial NSR permit application that the expected construction completion date for Unit 2 would be at the latest sometime in 2019. However, PNM requests that the anticipated construction date for Unit 2 to be determined at a later date.

- B. La Luz was originally permitted as a PSD major source (PSD-5041R1) due to the

facility's calculated greenhouse gas (GHG) emission rates exceeding 100,000 tpy of CO₂e. However, the Supreme Court in *Utility Air Regulatory Group v. Environmental Protection Agency et al.* has vacated the GHG Tailoring rule and ordered the Environmental Protection Agency (EPA) to take steps to rescind previously applicable GHG provisions. EPA followed the court order with a direct final action that delegated federal authority to the state level to rescind PSD permits within their jurisdiction under 40 CFR §52.21 (u). Therefore, PNM requests that the EPA and the NMED revise the permit to reflect that it is now a minor PSD source NSR permit removing all respective GHG BACT requirements found in Parts A100.B; A106.D, E, G, H and M; and A107 (C)(3). In addition, as a minor source, PSD BACT requirements for non-GHG pollutants would not be required and should be replaced by acceptable permit conditions.

- C. Second, the recordkeeping requirements (A105.B) for NH₃ was modified to be similar to the requirements in PNM's Afton Generating NSR Permit PSD2466-M4. To ensure the correct operations of the selective catalytic reduction system (SCR), the control system is setup to only allow ammonia injection at certain temperatures. Ammonia cannot be injected unless the SCR is at the proper temperature. In this way, the most efficient ammonia-NO_x reaction is achieved to control the emissions of NO_x and ammonia. Part A105.B of the NSR permit would read:

Recordkeeping:

Delete item (2) and replace with:

(2) The permittee shall maintain a manufacture's specification sheet, equipment manual, or equivalent documentation detailing the control system on the SCR unit which details the recommended unit temperature range to minimize ammonia slip.

- D. Third, the NO_x emissions standards condition was modified to correctly reflect 40 CFR Part 60 Subpart KKKK, 60.4380(b)(3), as well as Table 1. Specifically, 60.4380(b)(3) states,

For operating periods during which multiple emissions standards apply, the applicable standard is the average of the applicable standards during each hour. For hours with multiple emissions standards, the applicable limit for that hour is determined based on the condition that corresponded to the highest emissions standard.

Table 1 gives the standard for "turbines operating at less than 75 percent of peak load... and turbine(sic) operating at temperatures less than 0 °F" and with "> 30 MW Output" as "96 ppm at 15 percent O₂ or 590 ng/J of useful output (4.7 lb/MWh)." Further, this guidance given by Christian Fellner of the EPA was shared with PNM:

...during 4 hour periods that include startup and shutdown events, the NO_x standard used for reporting excess emissions is a calculated "blended" 4-hour average. For example, during any hour when either the turbine is operated

below 75% of the base load rating or the temperature is below 0 °F the alternate part load standard would apply for that hour.

Thus, during an operating period, the standard for a given hour during which multiple standards might apply is the least restrictive of those standards, and the standard for a 4-hour period is the average of the least restrictive standards for each hour.

- E. Fourth, added turbine malfunction emission limits to the permit. The hourly emission rates for turbine malfunction emissions are equal to the startup emission rates currently permitted for the turbines. PNM requested up to 5.0 tpy NO_x, CO, TSP, PM_{2.5}, PM₁₀, 2.7 tpy of NH₃, and 1.8 tpy of SO_x and HAPs per turbine. This is in accordance with the NMED's *Implementation Guidance for Permitting SSM Emissions and Excess Emissions*, June 2012.

The equipment, operating conditions, and the emissions, with the exception of the additional malfunction emissions, are unchanged from the initial NSR permit application.

14.0 Cross Reference Table between NSR Permit 5041M1 and TV Permit TBD.

Changed by NSR*	NSR Condition #5041R1	TV Section #
	A100 Introduction	A100 Introduction
deleted	A100.B BACT requirements	
	A101 Permit Duration	A101 Permit Duration
	A102 Facility Description	A102 Facility Description
updated	Table 102.A Total Potential Emissions	Table 102.A Total Potential Emissions
updated	A103 Facility: Applicable Regulations	A103 Facility: Applicable Regulations
updated	A104 Facility: Regulated Sources	A104 Facility: Regulated Sources
	A105 Facility: Control Equipment	A105 Facility: Control Equipment
	B. Selective Catalytic Reduction (SCR) System (Units 0001 and 0002)	
	C. Oxidation Catalyst System (Units 0001 and 0002)	
	A106 Facility: Allowable Emissions	A106 Facility: Allowable Emissions
	Table 106.A Allowable emissions	
	B. Units 0001 and 0002, sulfur dioxide emissions limit. (40 CFR 60, Subpart KKKK)	
	C. Units 0001 and 0002, nitrogen dioxide emissions limit. (40 CFR 60, Subpart KKKK)	
	D. Units 0001 and 0002, during steady state operations, nitrogen dioxide emissions limit. BACT	

Changed by NSR*	NSR Condition #5041R1	TV Section #
	E. Units 0001 and 0002, during startup and shutdown operations, nitrogen dioxide emissions limit. BACT	
	F. ammonia slip emissions are limited to 10 ppm	
	G. GHG BACT for the Turbines	
	H. GHG BACT for the circuit breakers	
	I. Units 0001 and 0002, during normal operations, CO emissions limitation.	
	J. CO CEMS and/or Test results demonstration	
	K. Units 0001 and 0002, during startup and shutdown operations limitations	
	L. Units 0001 and 0002 fuel limitations	
	M. Units 0001 and 0002, PM, PM ₁₀ , and PM _{2.5} emissions limit. BACT	
	N. Startup event definition	
	O. Shutdown event definition	
	P. Normal operation definition	
	A107 Facility: Allowable SSM	A107 Facility: Allowable SSM
	A107.C SSM	A107.C SSM
	A108 Facility: Hours of Operations	A108 Facility: Hours of Operations
XXX	A109 Facility: Reporting Schedules NR for NSR	A109 Facility: Reporting Schedules
		A109.A TV Semi-Annual
		A109.B TV ACC
		A109.C NSR Quarterly Reporting
NR	A110 Facility: Fuel & Fuel Sulfur Requirements	A110 Facility: Fuel Sulfur Requirements
	A111 Facility: 0.2.61 NMAC Opacity Limit	A111 Facility: 0.2.61 NMAC Opacity Limit
	A112 Facility: Haul Roads	A112 Facility: Haul Roads
NR	A200. Oil & Gas	A200. Oil & Gas
NR	A300 Construction Industry	A300 Construction Industry
	A400 Power Generation Industry	A400 Power Generation Industry

Changed by NSR*	NSR Condition #5041R1	TV Section #
	A401 Turbines	A401 Turbines
	A. Initial Compliance Test (Units 0001 and 0002)	A. Initial Compliance Test (Units 0001 and 0002)
	B. 40 CFR 60, Subpart KKKK (Units 0001 and 0002)	B. 40 CFR 60, Subpart KKKK (Units 0001 and 0002)
	C. CEMS (Units 0001 and 0002)	C. CEMS (Units 0001 and 0002)
	D. CEMS Data Capture (Units 0001 and 0002)	D. CEMS Data Capture (Units 0001 and 0002)
	E. Acid Rain Fuel Consumption Requirement (Units 0001 and 0002)	E. Acid Rain Fuel Consumption Requirement (Units 0001 and 0002)
updated	Part B General Conditions	Part B General Conditions, entire Section updated
updated	Part C MISCELLANEOUS	Part C MISCELLANEOUS

15.0 Permit specialist's notes to other NSR or Title V permitting staff concerning changes and updates to permit conditions.

A. Acid Rain New Unit Exemption: The two units at this facility do not qualify for this exemption since each unit has a nameplate capacity greater than 25 MWe. Therefore, are subject to the Acid Rain requirements and must obtain an Acid Rain Permit.

§ 72.7New units exemption.

(a)Applicability. This section applies to any new utility unit that has not previously lost an exemption under paragraph (f)(4) of this section and that, in each year starting with the first year for which the unit is to be exempt under this section:

- (1)** Serves during the entire year (except for any period before the unit commenced commercial operation) one or more generators with total nameplate capacity of 25 MWe or less;
- (2)** Burns fuel that does not include a ny coal or coal-derived fuel (except coal-derived gaseous fuel with a total sulfur content no greater than natural gas); and
- (3)** Burns gaseous fuel with an annual average sulfur content of 0.05 percent or less by weight (as determined under paragraph (d) of this section) and nongaseous fuel with an annual average sulfur content of 0.05 percent or less by weight (as determined under paragraph (d) of this section).

B. NSR 5041M1